



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/798,214 | 03/11/2004 | Hirofumi Takenoshita | HAY-101US | 6125 |

24314 7590 06/26/2006

JANSSON, SHUPE, MUNGER & ANTARAMIAN, LTD
245 MAIN STREET
RACINE, WI 53403

| |
|----------|
| EXAMINER |
|----------|

ALEXANDER, REGINALD

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1761

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,214

Applicant(s)

TAKENOSHITA ET AL.

Examiner

Reginald L. Alexander

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 19 is/are allowed.
- 6) ☒ Claim(s) 4-14, 16-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for independently controlling must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 5-7 and 10 are objected to because of the following informalities: The claims depend from a canceled claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-14, 16-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. in view of Shelton.

There is disclosed in Tsuji a vapor heat apparatus for killing insects or eggs on fruit, the apparatus comprising: a fruit processing chamber 1 housing fruit storage units (rows of stacked containers 20); air conditioning chambers provided with a heater 10.2 and fan 10.4, each air conditioning unit in communication with one of the storage units; air circulation units 4, 5, 10 for independently and forcedly blowing air through each storage unit, each air circulation unit including means 10.3 for supplying an amount of saturated vapor and temperature and humidity regulators 10; and means (programmable controller, not shown) for independently controlling the relative humidity in each of the storage units by controlling the amount of vapor supplied and a heat exchanging rate of the heater.

Shelton discloses that it is known in a food conditioning apparatus to use a means 24 for sensing a temperature of a food item (col. 5, lines 55-63) within a chamber, a means 79 for sensing a temperature of air passing into the chamber, and

means 69 for sensing a relative humidity of air in the chamber; wherein the sensing means deliver a signal to a control apparatus 25 for regulating a vapor supply means 13, 14 and a heat exchanging rate of a heater 22. Therefore maintaining a desired environment within the chamber.

It would have been obvious to one skilled in the art to provide the apparatus of Tsuji with the temperature sensors and humidity sensor taught in Shelton, for the purpose of providing more precise control of the air within the fruit processing chamber.

In regards to claims 5, 7, 8, 10, 12-14, 16-18, 20 and 21, the claims contain functional recitations with regard to how the device is operated. Such recitations provide no structural limitations to the claims.

Allowable Subject Matter

Claims 15 and 19 are allowed.

Conclusion

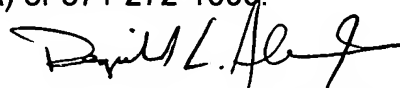
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Smith et al, Bolkestein, Bianco, Perryman, Jr., Handl et al. and Hullstrung are cited for their disclosure of the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald L. Alexander whose telephone number is 571-272-1395. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Reginald L. Alexander
Primary Examiner
Art Unit 1761

rla
15 June 2006